REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 7-15 and 18-26 are pending.

In the outstanding Office Action, Claims 18-26 were withdrawn; Claims 7-13 were rejected under 35 U.S.C. § 102(e) as anticipated by Kitahara et al. (U.S. Patent No. 6,962,045, hereinafter "Kitahara"); and Claims 14 and 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kitahara in view of Odendall (U.S. Patent No. 6,823,666).

In response to the rejections under 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a), Applicants respectfully request reconsideration of these rejections and traverse these rejections, as discussed below.

Independent Claim 7 recites:

> A method for control of a motorization system including a diesel engine, an air-intake circuit, and an exhaust circuit for exhaust gas originating from the engine, the intake circuit including an adjusting mechanism for controlling flow of air entering the engine and the exhaust circuit including a nitrogen oxides trap for storage of nitrogen oxides contained in the exhaust gases, the method performing a regeneration mode to regenerate the nitrogen oxides trap by supplying reducing exhaust gases, the method comprising:
>
> determining an index value of air flow corresponding to an operating point of the engine during the regeneration mode;
>
> instructing the adjusting mechanism to obtain an air flow close to the index value;
>
> measuring a variable back-pressure in the exhaust circuit;
>
> performing a primary and secondary injection of fuel, the secondary injection being performed during an expansion phase and operative to maintain the exhaust gases in a reducing state; and
>
> maintaining a constant fuel flow amount of the primary injection, increasing a fuel flow amount of the secondary injection, and increasing the air flow according to an increase

> in the variable back-pressure such that said diesel engine delivers a constant torque during a transition to said regeneration mode.

Accordingly, the method recited in Claim 7 includes measuring a variable back-pressure in the exhaust circuit. Further, when the measured variable back-pressure is increased, the method comprises maintaining a constant fuel flow amount of the primary injection, increasing a fuel flow amount of the secondary injection, and increasing the air flow. Therefore, the diesel engine can deliver a constant torque during a transition to the regeneration mode in which the nitrogen oxides trap is regenerated.

It is respectfully submitted that the cited references do not disclose or suggest every feature recited in independent Claim 7.

Kitahara describes an exhaust gas apparatus that includes both a NOx trap catalyst 13 and a diesel particulate filter DPF 14. Additionally, Kitahara describes methods of regenerating both the DPF 14 and the NOx trap catalyst 13. Specifically, Kitahara describes that during regeneration of the DPF 14, a post injection is carried out corresponding to an engine operating condition (Ne-engine speed, Q-primary injection) or that the post injection amount post Q is increased.[1] During the regeneration of NOx trap 13 in order to regenerate both the SOx and the NOx, the intake air amount is modified.[2]

However, it respectfully submitted that Kitahara does not disclose or suggest "maintaining a constant fuel flow amount of the primary injection, increasing a fuel flow amount of the secondary injection, and increasing the air flow according to an increase in the variable back-pressure such that said diesel engine delivers a constant torque during a transition to said regeneration mode," as recited in independent Claim 7.

Instead, as discussed above, during regeneration of the NOx trap 13, Kitahara only describes modifying the intake air amount as a result of the post injection. Thus, for

[1] See Kitahara, at column 5, lines 43-45 and in Figure 3.
[2] See Kitahara, at column 6, lines 41-46 and at column 7, lines 10-16.

regeneration of the NOx trap 13, Kitahara is silent with respect to increasing the fuel flow amount of a secondary injection.

The Office Action, in the first paragraph on page 4, relies on step S105 in Kitahara to describe that the secondary injection is increased. However, as discussed above, Kitahara only describes that the post injection is increased during regeneration of PDF 14, not NOx trap 13. Further, Kitahara does not disclose or suggest that the post injection amount is increased while maintaining a constant primary injection Q and increasing an air flow. Additionally, as noted in column 5, lines 43-45 of Kitahara, the post injection is increased based on the engine operating conditions of engine speed (Ne) and primary injection Q, and thus is not increased based on an increase in the variable back-pressure.

On the contrary, Kitahara only describes measuring the back pressure in order to determine when to begin regeneration of the PDF 14.[3] Therefore, Kitahara does not disclose or suggest maintaining a constant fuel flow amount of the primary injection, increasing a fuel flow amount of the secondary injection, and increasing the fuel flow amount based on the variable back-pressure such that the engine delivers a constant torque during a transition to said regenerating mode to regenerate the nitrogen oxides trap.

Accordingly, it is respectfully submitted that Kitahara does not disclose or suggest every feature recited in independent Claim 7. Therefore, it is respectfully requested that the rejection of Claim 7, and all claims depending thereon, as anticipated by Kitahara be withdrawn.

Claim 10 is dependent on Claim 7, and thus is believed to patentably define over Kitahara for at least the reasons discussed above with respect to Claim 7. Further, it is noted that Claim 10 recites that "the degree of loading of the particle filter is evaluated by an exhaust-gas flow passing through it and by pressure difference between an inlet and an outlet

[3] See Kitahara, at column 3, line 60 to column 4, line 5.

of the particle filter." Accordingly, as can be seen in the exemplary embodiment shown in Figure 1, a pressure at an inlet and outlet of the particle filter is measured by a differential pressure sensor 30.

On the contrary, as can be seen in Figure 1 of Kitahara, an exhaust gas pressure sensor 24 measures a pressure upstream of the particle filter 14. However, Kitahara does not disclose or suggest measuring a pressure downstream of the particle filter. Instead, Kitahara only describes an air-fuel ratio sensor 26 downstream of the particle filter 14.

Accordingly, it is respectfully submitted that Kitahara does not disclose or suggest every feature recited in Claim 10. Thus, it is respectfully submitted that Claim 10 further patentably defines over Kitahara.

Independent Claim 12, while directed to an alternative embodiment, recites features similar to those discussed above with respect to Claim 7. Accordingly, Claim 12 is also believed to patentably define over Kitahara. Therefore, it is respectfully requested that the rejection of Claim 12 as anticipated by Kitahara be withdrawn.

Regarding the rejection of Claims 14 and 15 as unpatentable over Kitahara in view of Odendall, it is noted that Claims 14 and 15 depend on independent Claim 7. Therefore, it is respectfully submitted that Claims 14 and 15 patentably define over Kitahara for at least the reasons discussed above with respect to Claim 7. Further, it is respectfully submitted that Odendall does not cure the above-noted deficiencies of Kitahara. Therefore, it is respectfully requested that the rejection of Claims 14 and 15 as unpatentable over Kitahara in view of Odendall be withdrawn.

Consequently, in view of the above discussion, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

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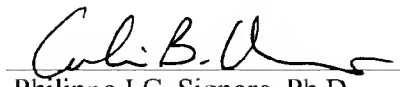

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